NOTICE OF ALLOWANCE AND ISSUE FEE DUE

TM02/0910

ANTHONY LAWS BIRCH 6915 BARRETT LANE BETHESDA MD 20814

	19/359,686	07/23/99	043	THOMPSON JR,	F	2165 (19/10/0
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THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS FROM</u> THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your fifthe SMALL ENTITY is shown as NO: current SMALL ENTITY status:
- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

EXAMINER AND GROUP ART UNIT

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- III. Part Balssue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance

PATENT AND TRADEMARK OFFICE COPY

PTOL-85 (REV. 10-96) Approved for use through 06/30/99. (0651-0033)



Notice of Allowability

Application No.

09/359,686

Applicant(s)

NIEBOER et al.

Examiner

Forest Thompson Jr.

Art Unit 2165



--The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

the initiative of the Office of upon petition by the applicant. See 37 CFR	1.313 and MPEP 1308.			
1. X This communication is responsive to <u>amendment filed 07/26/01</u>				
2. X The allowed claim(s) is/are 1-18 and 20-44				
3. The drawings filed on are acceptable a	as formal drawings.			
4. Acknowledgement is made of a claim for foreign priority under 35				
a) 🗌 All b) 🖫 some* c) Nane of the:				
 Certified copies of the priority documents have been received 	ed.			
2. Certified copies of the priority documents have been received	ed in Application No.			
3. ☐ Copies of the certified copies of the priority documents have application from the International Bureau (PCT Rule 17.2	e been received in this national stage (a)).			
*Certified copies not received:				
5. Acknowledgement is made of a claim for domestic priority under 3	- ',			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this comm noted below. Failure to timely comply will result in ABANDONMENT of the EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBST for complying with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL	is application. THIS THREE-MONTH PERIOD IS NOT ITUTE OATH OR DECLARATION. This three-month period MATERIAL is extendable under 37 CFR 1.136(a).			
6. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFreason(s) why the oath or declaration is deficient. A SUBSTITUT	OPMAL APPLICATION (DTO 450)			
7. X Applicant MUST submit NEW FORMAL DRAWINGS				
(a) $oxed{X}$ including changes required by the Notice of Draftsperson's Pat	ent Drawing Review (PTO-948) attached			
1) 🗌 hereto or 2) 🌋 o Paper No2 .				
(b) ☐ including changes required by the proposed drawing correction approved by the examiner.				
(c) ☐ including changes required by the attached Examiner's Amendon Paper No	ment/Comment or in the Office action of			
Identifying indicia such as the application number (see 37 CFR 1. drawings should be filed as a separate paper with a transmittal le	84(c)) should be written on the drawings. The etter addressed to the Official Draftsperson.			
8. \square Note the attached Examiner's comment regarding REQUIREMENT	FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.			
Any reply to this letter should include, in the upper right hand corner, the NUMBER). If applicant has received a Notice of Allowance and Issue Fee NOTICE OF ALLOWANCE should also be included.	APPLICATION NUMBER (SERVE CORESPONDE			
Attachment(s)				
1 X Notice of References Cited (PTO-892)	2 Notice of Informal Patent Application (PTO-152)			
3 ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4 Interview Summary (PTO-413), Paper No			
5 Information Disclosure Statement(s) (PTO-1449), Paper No(s).	6 🔀 Examiner's Amendment/Comment			
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8 🗓 Examiner's Statement of Reasons for Allowance			
Other				



Art Unit: 2165

DETAILED ACTION

Response to Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anthony L. Birch (#26,122) (applicant's representative) on 08/06/2001.

Examiner's Amendment:

In independent claim 44 at lines 3-4, applicant presents the text "including the represented". In independent claims 1, 24 and 41 at line 3, applicant presents "including price represented". Therefore, examiner amends claim 44 to read "including [the] <u>price</u> represented" in lines 3-4

2. Claims 1-18 and 20-44 are allowed.



Art Unit: 2165

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action (See Paper No. 2). The text of those sections of Title 35, U.S. Code not otherwise provided in a prior Office action will be included in this action where appropriate.
- 4. Applicant's amendment (amendment B) filed on 07/26/01, in combination with examiner's amendment above, is sufficient to overcome the objections and rejections stated in the Action mailed 03/29/01.
- 5. This action is responsive to applicant's amendment (amendment B) filed 26 July 2001 (see Paper #7) and examiner's amendment in section 1 above. Amendment B amended claims 1-3, 24, 41, and 44. Examiner's amendment amended claim 44. Claims 1-18 and 20-44 are pending.

Allowable Subject Matter

- 6. The application having been allowed, formal drawings are required in response to this Office action.
- 7. The following is an examiner's statement of reasons for allowance:



Art Unit: 2165

Applicant's invention presents a network and workstation for conditional trading of items, such as securities and contracts. The key elements, which are specified in all of the independent claims #'s 1, 24, 41, and 44, which differentiate the invention over prior art, are:

- a security instrument or item input by the system administrator in the form of an algorithm with constraints thereon,
- a variable number of trader terminals for entering an order for a security instrument that represents a willingness to transact the algorithm,
- a price set forth within an order is represented as an algorithm with constraints thereon,
- the price for the trade of one security (or item) is a dependent variable of the algorithm within the constraints,
- dynamically changing a price of another security is an independent variable of the algorithm within the constraints,
- the price as the dependent variable being continuously changeable responsive to changes in price of the independent variable, and
- the algorithm representing a buy or sell order.

Prior art discloses some of the aspects or properties of the invention, as well as the aspect of buyers defining contract terms(**Shepherd** [U.S. Patent No. 6,134,53], col. 9 lines 20-22), whereas the invention does not allow buyers to define contract terms; system administrators predefine and input the securities and contracts (see Paper #7, pg. 9, 3rd para.). Prior art does not



Art Unit: 2165

disclose or suggest the features as disclosed in applicant's invention and stated in all of the independent claims 1, 24, 41, and 44.

Applicant's and examiner's amendments make the invention unique and distinct over prior art. Prior art of record includes:

- **Shepherd** (U.S. Patent No. 6,134,536) discloses methods and apparatus which deal with the management of risk relating to specified, yet unknown, future events;
- **Borgato** (U.S. Patent No. 5,950,178) discloses representations of stock market activity may be represented on a graphics computer monitor/screen for monitoring activity related to stocks and the market;
- Williams et al. (U.S. Patent No. 5,999,918) discloses a computer interface system that includes interactive interface controls as well as aural and kinetic interface controls to assist in educating a user, in profiling a user, and in controlling and monitoring the implementation of actions involving probabilistic distributions;
- Wiseman (U.S. Patent No. 5,168,446) discloses a system is provided for processing spot trades in selected commodities among a group of trading stations in a communication network through a series of structured stages;
- Ferstenberg et al. (U.S. Patent No. 5,873,071) discloses, in a preferred embodiment, this invention includes software processes distributed on one or more computer systems that



Art Unit: 2165

exchange messages in order to facilitate an intermediated exchange of financial commodities between a plurality of participants;

- Kull, David; Keough, Lee; "The house of games;" Computer Decisions; v20, n8, pg. 43(11); August 1989, discloses the New York Stock Exchange tries to change computer-triggered trading schemes and restore investor confidence after the October 19, 1987 stock market collapse;
- Scholldorf (EPO Patent No. 0 411 748 A2) discloses a risk control matching system for trading instruments, such as foreign exchange currencies, in which bids are automatically matched against offers for given trading instruments;
- Lupien (EPO Patent No. 0 401 203) discloses an automated system for managing one or more large investor portfolios containing both cash and numerous, diversified securities in a real time environment providing liquidity to the securities markets while maintaining predetermined portfolio objectives for each portfolio;
- "State Street and the Boston Stock exchange Announce Exclusive Agreement On State Street's Bond Connect in the United States;" Business Editors; 19 August 1998; discloses limitations in the traditional trading environment by offering investors the ability to formulate orders linked to portfolio strategy; and
- Lee, Charles M.C.; "Market integration and price execution for the NYSE-listed securities;" Journal of finance; v48; n3; pg. 1003(30); July 1993; discloses, for NYSE listed securities, the price execution of seemingly comparable orders differs systematically by location.

Art Unit: 2165

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forest Thompson whose telephone number is (703) 306-5449. The examiner can normally be reached Monday-Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins, can be reached at (703) 308-1344.

The fax number for faxes to Technology Center 2100 is (703) 308-9051 or 9052.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

August 10, 2001 /FOT

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100